EXACT ENGLISH LANGUAGE
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APPLICATION AS
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WITH ABSTRACT

## **Abstract**

A method for producing a multi-layer resin film, wherein a plurality of molten resins being different in the melt viscosity are laminated on the surface of a film containing at least one resin containing a coloring component without formation of irregularities; and a method for producing a metal sheet having a resin coating film which comprises laminating said film on a metal sheet. The above method for producing a multi-layer resin film comprises keeping the temperatures of an extruder. a manifold and a dye portion adjacent to the manifold for the pass of a resin having a higher melt viscosity at a level higher than those of the temperatures of an extruder. a manifold and a dye portion adjacent to the manifold for the pass of a resin having a lower melt viscosity, to thereby reduce the difference in the melt viscosities of adjacent resin layers to 3000 poise or less at a shear rate of 20 to 500 sec-1, and laminating respective molten resins while adjusting a resin containing a coloring component so as to have  $0.5g \le Tm \le 1.0g$ , wherein Tm represents a melt strength, and a thickness of one half of the total thickness or more or having  $Tm \ge 1.0g$  and a thickness of one third of the total thickness or more, to thereby form a multi-layer film.



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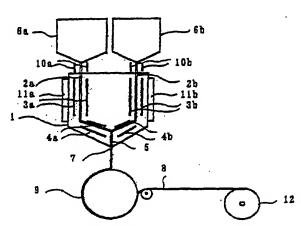
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(54) Title: MULTI-LAYER RESIN FILM, METAL PLATE COATED WITH RESIN, METHOD FOR PRODUCING MULTI-LAYER RESIN FILM, AND METHOD FOR PRODUCING METAL SHEET COATED WITH RESIN

(54) 発明の名称: 多層樹脂フィルム、樹脂被覆金属板、多層樹脂フィルムの製造方法、および樹脂被覆金属板の製造方法



(57) Abstract: A method for producing a multi-layer resin film, wherein a plurality of molten resins being different in the melt viscosity are laminated on the surface of a film containing at least one resin containing a coloring component without formation of irregularities; and a method for producing a metal sheet having a resin coating film which comprises laminating said film on a metal sheet. The above method for producing a multi-layer resin film comprises keeping the temperatures of an extruder, a manifold and a dye portion adjacent to the manifold for the pass of a resin having a higher melt viscosity at a level higher than those of the temperatures of an extruder, a manifold and a dye portion adjacent to the manifold for the pass of a resin having a lower melt viscosity, to thereby reduce the difference in the melt viscosities of adjacent resin layers to 3000 poise or less at a shear rate of 20 to 500 sec<sup>-1</sup>, and laminating respective molten resins while adjusting a resin containing a coloring component so as to have  $0.5g \le Tm \le 1.0$  g, wherein Tm represents a melt strength, and a thickness of one half of the total thickness or more or having Tm  $\ge 1.0$  g and a thickness of one third of the total thickness or more, to thereby form a multi-layer film.

(57) 要約: 溶融粘度が互いに相違する複数の溶融樹脂を、着色成分を含有した樹脂を少なくとも 1 種類以上含んだフィルム表面に凹凸を形成させずに積層して多層樹脂フィルムとする多層樹脂フィルムの製造方法、ならびに該フィルムを金属板に積層する樹脂被覆金属板の製造方法を提供することを目的とする。 溶融粘度の高い樹脂が通る押出機、マニフォルド、およびマニフォルドに隣接するダイの部

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